

LISTING OF THE CLAIMS

The following listing of the claims is provided for the Examiner's convenience. No amendments have been made herein.

Listing of Claims:

Claims 1-49 (canceled)

Claim 50 (previously presented): A method for carrying out a hands-free communication using a telecommunication terminal, the method comprising:

loading, at least temporarily, at least one program from a service server into the telecommunication terminal, the at least one program being configured to implement a speech processing algorithm;

implementing the at least one program for use at least for a duration of a communication connection to process a speech signal; and

transmitting the processed speech signal over at least one communication network.

Claim 51 (previously presented): The method as recited in claim 50 wherein the telecommunication terminal is a mobile telecommunication terminal.

Claim 52 (previously presented): The method as recited in claim 50 wherein the speech processing algorithm includes at least one of a hands-free, an echo cancellation, a speaker verification, a speaker recognition, a speaker classification, a voice verification, a voice recognition, a text-to-speech and a noise reduction algorithm.

Claim 53 (previously presented): The method as recited in claim 50 further comprising establishing, over the at least one communication network, a connection between the telecommunication terminal and a server-based speech recognition system.

Claim 54 (previously presented): The method as recited in claim 50 further comprising establishing a connection to the service server over the at least one communication network so as to facilitate the loading.

Claim 55 (previously presented): The method as recited in claim 54 wherein the connection is established via an interposed server-based speech recognition system.

Claim 56 (previously presented): The method as recited in claim 54 wherein the connection is established between the service server and the telecommunication terminal in response to an automatic or user-defined request signal by the telecommunication terminal.

Claim 57 (previously presented): The method as recited in claim 54 wherein the connection is established between the service server and the telecommunication terminal in response to a request signal of a server-based speech recognition system.

Claim 58 (previously presented): The method as recited in claim 54 wherein the establishing the connection is performed using respectively assigned identifiers.

Claim 59 (previously presented): The method as recited in claim 58 wherein the respectively assigned identifiers include at least one of a CLI, an ANI and an HLR.

Claim 60 (previously presented): The method as recited in claim 50 further comprising transmitting further signals during the communication connection.

Claim 61 (previously presented): The method as recited in claim 60 wherein the further signals include at least one of test signals, compensation signals, charging signals, identification parameters, and vector signals.

Claim 62 (previously presented): The method as recited in claim 50 further comprising selecting the speech processing algorithm using at least one of the telecommunication terminal, a speech recognition system, and the service server.

Claim 63 (previously presented): The method as recited in claim 50 further comprising loading the at least one program again during the communication connection.

Claim 64 (previously presented): The method as recited in claim 50 further comprising: updating the at least one program; and
loading, at least temporarily, the updated at least one program into the telecommunication terminal during the communication connection.

Claim 65 (previously presented): The method as recited in claim 50 further comprising transmitting, by the telecommunication terminal, at least one of a specific identification parameter and a charging parameter for further processing by a device associated with at least one of a speech recognition system and the service server.

Claim 66 (previously presented): The method as recited in claim 50 further comprising calibrating, by the telecommunication terminal, at least one of an A/D conversion and a D/A conversion.

Claim 67 (previously presented): The method as recited in claim 66 wherein the calibrating is performed at least one of once during the communication connection, continuously, and digitally.

Claim 68 (previously presented): The method as recited in claim 66 wherein the calibrating is performed using a compensation signal, the compensation signal being at least one of the speech signal and a test signal.

Claim 69 (previously presented): The method as recited in claim 67 further comprising performing a procedure for locating a speech source.

Claim 70 (previously presented): The method as recited in claim 69 wherein the performing the procedure for locating the speech source is performed for a multi-channel processing of at least two microphone signals.

Claim 71 (previously presented): The method as recited in claim 69 wherein the performing the procedure for locating the speech source is performed so as to achieve a noise reduction.

Claim 72 (previously presented): A system for providing hands-free communication for at least one telecommunication terminal, the system comprising a service server configured to: provide at least one program for implementing a speech processing algorithm; and transmit, in response to a defined request signal, the at least one program to the at least one telecommunication terminal for at least temporary implementation of the at least one program, wherein the telecommunication terminal is configured to implement the at least one program to process a speech signal and to transmit the processed speech signal over at least one communication network.

Claim 73 (previously presented): The system as recited in claim 72 wherein the at least one telecommunication terminal includes a mobile telecommunication terminal.

Claim 74 (previously presented): The system as recited in claim 72 wherein the speech processing algorithm includes at least one of a hands-free, an echo cancellation, a speaker verification, a speaker recognition, a speaker classification, a voice verification, a voice recognition, a text-to-speech and a noise reduction algorithm.

Claim 75 (previously presented): The system as recited in claim 72 further comprising at least one of a server-based speech recognition system, a charging system and a billing system.

Claim 76 (previously presented): The system as recited in claim 72 wherein the service server is provided by a WEB server, and further comprising at least one of a server-based speech recognition system, a charging and a billing system provided by the WEB server.

Claim 77 (previously presented): The system as recited in claim 75 wherein the service server is configured to communicate with at least one of the at least one telecommunication terminal, the server-based speech recognition system, the charging system and the billing system over a communications connection established using respectively assigned identifiers.

Claim 78 (previously presented): The system as recited in claim 72 further comprising a server-based speech recognition system configured to enable the at least one program to be selected and at least temporarily loaded and implemented on the at least one telecommunication terminal in response to identification parameters associated with the at least one telecommunication terminal.

Claim 79 (previously presented): The system as recited in claim 72 wherein the service server is configured to enable the at least one program to be selected and at least temporarily loaded and implemented on the at least one telecommunication terminal in response to identification parameters associated with the at least one telecommunication terminal.

Claim 80 (previously presented): The system as recited in claim 72 further comprising a server-based speech recognition system and at least one of a charging system and a billing system configured to charge, in response to at least one of an identification and a charging parameter associated with the at least one telecommunication terminal, for a service at least temporarily provided by a server-based speech recognition system to the at least one telecommunication terminal.

Claim 81 (previously presented): The system as recited in claim 72 further comprising at least one of a charging system and a billing system configured to charge, in response to at least one of an identification and a charging parameter associated with the at least one telecommunication terminal, for the at least temporary implementation of the at least one program.

Claim 82 (previously presented): A telecommunication terminal comprising:
a receiver configured to receive at least one program for implementing a speech processing algorithm transmitted, in response to a defined request signal, from a service server for at least temporary implementation of the at least one program; and

a processor unit configured to implement the speech processing algorithm to process a speech signal; and

a transmitter configured to transmit the processed speech signal over at least one communication network.

Claim 83 (previously presented): The telecommunication terminal as recited in claim 82 wherein the speech processing algorithm includes at least one of a hands-free, an echo cancellation, a speaker verification, a speaker recognition, a speaker classification, a voice verification, a voice recognition, a text-to-speech and a noise reduction algorithm.

Claim 84 (previously presented): The telecommunication terminal as recited in claim 82 further comprising:

an A/D converter;

a D/A converter; and

a calibration device configured to at least one of calibrate the A/D and D/A converters and perform a digital calibration.

Claim 85 (previously presented): The telecommunication terminal as recited in claim 84 wherein the calibration device is configured to calibration automatically using at least one of a speech signal and a test signal as the compensation signal.

Claim 86 (previously presented): The telecommunication terminal as recited in claim 82 further comprising an encoder unit.

Claim 87 (previously presented): The telecommunication terminal as recited in claim 82 further comprising a conversion device configured to convert a speech signal between different frequency bands.

Claim 88 (previously presented): The telecommunication terminal as recited in claim 82 further comprising an interface device configured for at least one of wired and wireless connection of at least one of an external microphone and a loudspeaker.

Claim 89 (previously presented): The method as recited in claim 62 wherein the speech processing algorithm is selected in response to identification parameters associated with the telecommunication terminal.

Claim 90 (previously presented): The method as recited in claim 62 wherein the speech processing algorithm is selected in response to a current environment associated with the telecommunication terminal.